Section 1. Registration Information

Source Identification

Facility Name:	Reddy Ice-Phoenix (352)
Parent Company #1 Name:	Reddy Ice Corp
Parent Company #2 Name:	

Submission and Acceptance

Submission Type:	Re-submission
Subsequent RMP Submission Reason:	5-year update (40 CFR 68.190(b)(1))
Description:	
Receipt Date:	27-Apr-2011
Postmark Date:	27-Apr-2011
Next Due Date:	27-Apr-2016
Completeness Check Date:	27-Apr-2011
Complete RMP:	Yes
De-Registration / Closed Reason:	
De-Registration / Closed Reason Other Text:	
De-Registered / Closed Date:	
De-Registered / Closed Effective Date:	
Certification Received:	Yes

Facility Identification

EPA Facility Identifier:	1000 0013 3526
Other EPA Systems Facility ID:	85040SPRKL4626S

Dun and Bradstreet Numbers (DUNS)

Facility DUNS:	
Parent Company #1 DUNS:	364514133
Parent Company #2 DUNS:	364514133

Facility Location Address

Street 1:	4626 South 40th Street
Street 2:	
City:	Phoenix
State:	ARIZONA
ZIP:	85040
ZIP4:	
County:	MARICOPA

Facility Latitude and Longitude

Latitude (decimal):	33.405000
Longitude (decimal):	-111.996390
Lat/Long Method:	Interpolation - Digital map source (TIGER)
Lat/Long Description:	Process Unit Area Centroid
Horizontal Accuracy Measure:	10
Horizontal Reference Datum Name:	World Geodetic System of 1984
Source Map Scale Number:	

Owner or Operator

Operator Name:	Reddy Ice Corp
Operator Phone:	(214) 526-6740

Mailing Address

Operator Street 1:	8750 North Central Expressway
Operator Street 2:	Suite 1800
Operator City:	Dallas
Operator State:	TEXAS
Operator ZIP:	75231
Operator ZIP4:	
Operator Foreign State or Province:	
Operator Foreign ZIP:	
Operator Foreign Country:	

Name and title of person or position responsible for Part 68 (RMP) Implementation

RMP Name of Person:	Russ Hase
RMP Title of Person or Position:	Plant Manager
RMP E-mail Address:	rhase@reddyice.com

Emergency Contact

Emergency Contact Name:	Russ Hase
Emergency Contact Title:	Plant Manager
Emergency Contact Phone:	(602) 437-5508
Emergency Contact 24-Hour Phone:	(303) 901-9085
Emergency Contact Ext. or PIN:	
Emergency Contact E-mail Address:	rhase@reddyice.com

Other Points of Contact

Facility or Parent Company E-mail Address:	
Facility Public Contact Phone:	
Facility or Parent Company WWW Homepage Address:	www.reddyice.com

Local Emergency Planning Committee

LEPC:	Maricopa County DEM

Full Time Equivalent Employees

Number of Full Time Employees (FTE) on Site:	40
FTE Claimed as CBI:	

Covered By

OSHA PSM :	Yes
EPCRA 302 :	Yes
CAA Title V:	
Air Operating Permit ID:	

OSHA Ranking

OSHA Star or Merit Ranking:

Last Safety Inspection

Last Safety Inspection (By an External Agency) Date:	22-Feb-2011
Last Safety Inspection Performed By an External Agency:	EPA

Predictive Filing

Did this RMP involve predictive filing?:

Preparer Information

Preparer Name:
Preparer Phone:
Preparer Street 1:
Preparer Street 2:
Preparer City:
Preparer State:
Preparer ZIP:
Preparer ZIP4:
Preparer Foreign State:
Preparer Foreign Country:
Preparer Foreign ZIP:

Confidential Business Information (CBI)

CBI Claimed:
Substantiation Provided:
Unsanitized RMP Provided:

Reportable Accidents

Reportable Accidents:	See Section 6. Accident History below to determine if there were any accidents reported for this RMP.

Process Chemicals

Process ID:	1000026657
Description:	Ammonia Refrigeration
Process Chemical ID:	1000031663
Program Level:	Program Level 3 process
Chemical Name:	Ammonia (anhydrous)
CAS Number:	7664-41-7
Quantity (lbs):	40500
CBI Claimed:	
Flammable/Toxic:	Toxic

Process NAICS

Process ID:	1000026657
Process NAICS ID:	1000026982
Program Level:	Program Level 3 process
NAICS Code:	312113
NAICS Description:	Ice Manufacturing

Section 2. Toxics: Worst Case

Toxic Worst ID: 1000022124

Percent Weight:	100.0
Physical State:	Gas liquified by pressure
Model Used:	EPA's RMP*Comp(TM)
Release Duration (mins):	10
Wind Speed (m/sec):	1.6
Atmospheric Stability Class:	F
Topography:	Urban

Passive Mitigation Considered

Dikes:	
Enclosures:	
Berms:	
Drains:	
Sumps:	
Other Type:	

Section 3. Toxics: Alternative Release

Toxic Alter ID: 1000023817

Percent Weight:	
Physical State:	Gas liquified by pressure
Model Used:	EPA's RMP*Comp(TM)
Wind Speed (m/sec):	3.0
Atmospheric Stability Class:	D
Topography:	Urban

Passive Mitigation Considered

Dikes:	
Enclosures:	Yes
Berms:	
Drains:	
Sumps:	
Other Type:	

Active Mitigation Considered

Sprinkler System:	
Deluge System:	
Water Curtain:	
Neutralization:	Yes
Excess Flow Valve:	
Flares:	
Scrubbers:	
Emergency Shutdown:	Yes
Other Type:	

Section 4. Flammables: Worst Case

No records found.

Section 5. Flammables: Alternative Release

No records found.

Section 6. Accident History

No records found.

Section 7. Program Level 3

Description

Based on the Reddy Ice-Phoenix (352) facility, ammonia inventory, location and requirement to meet OSHA PSM standards, it has been determined the facility is subject to Accident Prevention Program 3 requirements. The facility has developed a Combined Process Safety Management/Risk Management (PSM/RM) Program to address the accident prevention program requirements of both the OSHA and EPA regulations. The purpose of the PSM/RM Program is to make safe operations and accident prevention systematicthroughout the facility. The PSM/RM Prevention Program contains thirteen elements, coordinated through a management system to ensure consistent development, implementation and integration of the Program requirements. These thirteen elements consist of the following: Employee Participation, Process Safety Information, Process Hazard Analysis, Pre-Startup Safety Review Program, Standard Operating Procedures, Training, Management of Change, Mechanical Integrity, Hot Work Permits, Contractor Qualifications, Incident Investigation, Compliance Audits and Trade Secrets.

Reddy Ice corporate management and Reddy Ice-Phoenix management are committed to operating safe and compliant facilities for the protection of its employees, the public and the environment. The facility has multiple safeguards pertinent to the anhydrous ammonia process. These safeguards include continuous and emergency engine room ventilation, failsafe controls that shut down the compressors if operating limits are exceeded, the capability of shutting the entire system down if required and computerized PLC controls. Ammonia detection units are installed throughout the facility to notify employees in the event of an ammonia release. Administrative controls are in place limiting the utilization of vessels to less than their maximum intended capacities.

The company has also developed an emergency response plan that includes: procedures for notifying public and local emergency responders; emergency response duties by trained refrigeration personnel; emergency evacuation of personnel; use of emergency alarms and equipment; employee training in evacuation and response procedures; and periodic review and updating of the written plan.

Program Level 3 Prevention Program Chemicals

Prevention Program Chemical ID:	1000027074
Chemical Name:	Ammonia (anhydrous)
Flammable/Toxic:	Toxic
CAS Number:	7664-41-7
Prevention Program Level 3 ID:	1000022909
NAICS Code:	312113

Safety Information

Safety Review Date (The date on which the safety information was last reviewed or revised):	22-Feb-2010

Process Hazard Analysis (PHA)

PHA Completion Date (Date of last PHA or PHA update):	10-Dec-2007

The Technique Used

What If:	
Checklist:	Yes
What If/Checklist:	
HAZOP:	
Failure Mode and Effects Analysis:	

Fault Tree Analysis:	
Other Technique Used:	
PHA Change Completion Date (The expected or actual date of completion of all changes resulting from last PHA or PHA update):	10-Dec-2008

Major Hazards Identified

Toxic Release:	Yes
Fire:	Yes
Explosion:	Yes
Runaway Reaction:	
Polymerization:	
Overpressurization:	Yes
Corrosion:	Yes
Overfilling:	Yes
Contamination:	
Equipment Failure:	Yes
Loss of Cooling, Heating, Electricity, Instrument Air:	Yes
Earthquake:	
Floods (Flood Plain):	
Tornado:	
Hurricanes:	
Other Major Hazard Identified:	

Process Controls in Use

Vents:	Yes
Relief Valves:	Yes
Check Valves:	Yes
Scrubbers:	
Flares:	
Manual Shutoffs:	Yes
Automatic Shutoffs:	Yes
Interlocks:	Yes
Alarms and Procedures:	Yes
Keyed Bypass:	
Emergency Air Supply:	
Emergency Power:	
Backup Pump:	
Grounding Equipment:	
Inhibitor Addition:	
Rupture Disks:	
Excess Flow Device:	
Quench System:	
Purge System:	Yes
None:	
Other Process Control in Use:	Administrative controls, PLC computerized controls

Mitigation Systems in Use

Sprinkler System:	Yes
Dikes:	
Fire Walls:	Yes
Blast Walls:	
Deluge System:	

Water Curtain:	
Enclosure:	
Neutralization:	Yes
None:	
Other Mitigation System in Use:	Fire Department ammonia dump system into diffustion tank

Monitoring/Detection Systems in Use

Process Area Detectors:	Yes
Perimeter Monitors:	
None:	
Other Monitoring/Detection System in Use:	Audible/visual ammonia alarms

Changes Since Last PHA Update

Reduction in Chemical Inventory:	
Increase in Chemical Inventory:	
Change Process Parameters:	
Installation of Process Controls:	
Installation of Process Detection Systems:	
Installation of Perimeter Monitoring Systems:	
Installation of Mitigation Systems:	
None Recommended:	Yes
None:	
Other Changes Since Last PHA or PHA Update:	

Review of Operating Procedures

Operating Procedures Revision Date (The date of the most recent review or revision of operating procedures):	22-Feb-2011

Training

Training Revision Date (The date of the most recent review or revision of training programs):	22-Feb-2011

The Type of Training Provided

Classroom:	
On the Job:	Yes
Other Training:	

The Type of Competency Testing Used

Written Tests:	
Oral Tests:	
Demonstration:	Yes
Observation:	Yes
Other Type of Competency Testing Used:	

Maintenance

Maintenance Procedures Revision Date (The date of the most recent review or revision of maintenance procedures):	22-Feb-2011
Equipment Inspection Date (The date of the most recent equipment inspection or test):	25-Apr-2011
Equipment Tested (Equipment most recently inspected or tested):	Daily system walkthrough that provides visual inspection of system conditions.

Management of Change

Change Management Date (The date of the most recent change that triggered management of change procedures):	14-Mar-2006
Change Management Revision Date (The date of the most recent review or revision of management of change procedures):	22-Feb-2011

Pre-Startup Review

Pre-Startup Review Date (The date of the most recent pre-startup review):	07-Mar-2006

Compliance Audits

Compliance Audit Date (The date of the most recent compliance audit):	15-Oct-2008
Compliance Audit Change Completion Date (Expected or actual date of completion of all changes resulting from the compliance audit):	15-Oct-2009

Incident Investigation

Incident Investigation Date (The date of the most recent incident investigation (if any)):	11-Mar-2008
Incident Investigation Change Date (The expected or actual date of completion of all changes resulting from the investigation):	11-Apr-2008

Employee Participation Plans

Participation Plan Revision Date (The date of the most recent review or revision of employee participation plans):	22-Feb-2011

Hot Work Permit Procedures

Hot Work permit Review Date (The date of the most recent review or revision of hot work permit procedures):	22-Feb-2011

Contractor Safety Procedures

Contractor Safety Procedures Review Date (The date of the most recent review or revision of contractor safety procedures):	22-Feb-2011
Contractor Safety Performance Evaluation Date (The date of the most recent review or revision of contractor safety performance):	

Confidential Business Information

CBI Claimed:

Section 8. Program Level 2

Section 9. Emergency Response

Written Emergency Response (ER) Plan

Community Plan (Is facility included in written community emergency response plan?):	Yes
Facility Plan (Does facility have its own written emergency response plan?):	Yes
Response Actions (Does ER plan include specific actions to be taken in response to accidental releases of regulated substance(s)?):	Yes
Public Information (Does ER plan include procedures for informing the public and local agencies responding to accidental release?):	Yes
Healthcare (Does facility's ER plan include information on emergency health care?):	Yes

Emergency Response Review

Review Date (Date of most recent review or update of facility's ER plan):	22-Feb-2011

Emergency Response Training

Training Date (Date of most recent review or update of facility's employees):	21-Feb-2011

Local Agency

Agency Name (Name of local agency with which the facility ER plan or response activities are coordinated):	Maricopa County DEM
Agency Phone Number (Phone number of local agency with which the facility ER plan or response activities are coordinated):	(602) 273-1411

Subject to

OSHA Regulations at 29 CFR 1910.38:	Yes
OSHA Regulations at 29 CFR 1910.120:	Yes
Clean Water Regulations at 40 CFR 112:	
RCRA Regulations at CFR 264, 265, and 279.52:	
OPA 90 Regulations at 40 CFR 112, 33 CFR 154, 49 CFR 194, or 30 CFR 254:	
State EPCRA Rules or Laws:	Yes
Other (Specify):	

Executive Summary

PROCESS SUMMARY

The Reddy Ice facility located in Phoenix, Arizona (#352), manufactures ice for wholesale/retail distribution. The facility maintains approximately 40,500 pounds of anhydrous ammonia as a refrigerant for ice manufacturing and storage.

The facility has two refrigeration systems, each utilizing a standard closed-loop design consisting of compressors, condensers, thermosyphon vessels, high-pressure and low-pressure ammonia storage vessels, ice makers, and freezer vaults. The systems have numerous protective controls including motor overload, high and low temperature and pressure, low oil pressure, high and low liquid level cutouts, and pressure relief valves on all equipment. Ammonia detectors and alarms are installed throughout the plant.

Anhydrous ammonia, when properly used, has proven to be a safe and reliable refrigerant. The sharp odor of ammonia provides its own warning agent. Practically all accidents involving anhydrous ammonia can be avoided through the facility's program of proper training; knowledge of the equipment and procedures; and conducting preventive maintenance on all ammonia equipment. Reddy Ice has instituted administrative and engineering controls as well as training programs on the corporate level to prevent such accidents.

The facility has multiple safeguards pertinent to the anhydrous ammonia process. These include an ammonia detection and alarm system, exhaust purge fans, controls which shut down the compressors if operating limits are exceeded, and the capability of shutting the entire system down if required. Administrative controls are in place limiting the utilization of vessels to less than their intended maximum capacities.

The company has also developed an emergency response plan (ERP) that includes: procedures for notification of emergency authorities/agencies and the public; evacuation of personnel; emergency response duties or first responder duties by trained refrigeration personnel with fire department backup; use of emergency alarms and equipment; employee training in evacuation and response procedures; and periodic review and updating of the written plan.

RISK MANAGEMENT PREVENTION PROGRAM 3

Based on the Reddy Ice-Phoenix facility ammonia inventory, location, and requirement to meet OSHA PSM standards, it has been determined the facility is subject to the Prevention Program 3 requirements. This accident prevention program is a way to make safe operations and accident prevention systematic throughout the facility. Reddy Ice corporate management and Reddy Ice-Phoenix management are committed to operating a safe and compliant facility for the protection of its employees, the public, and the environment. A Combined Process Safety Management/Risk Management (PSM/RM) Program has been developed to meet the accidental release prevention requirements of both EPA's Risk Management Program (40 CFR Part 68) and OSHA's Process Safety Management Standard (29 CFR 1910.119) under the Clean Air Act. The Combined PSM/RM Program contains thirteen elements, establishing requirements for employee participation, safety information, hazard analysis, pre-startup safety review, standard operating procedures, employee training, management of change, mechanical integrity/preventive maintenance, hot work permits, contractor qualifications, release incident investigation, compliance audits, and trade secrets. These elements are tied together by a management system to ensure plant-wide development, implementation and integration of all the Program requirements.

MANAGEMENT SYSTEM

A management system has been developed to oversee the implementation of the PSM/RM Program elements. The plant manager has been identified as PSM/RM Program Coordinator, with overall responsibility for developing, implementing and integrating the Program requirements. Under the PSM/RM Program, various responsibilities have been assigned to other individuals. The plant engineer is responsible for portions of the program closely tied to the refrigeration equipment and operation. An established safety committee meets each month to present a safety meeting and address any safety issues brought up by employees during the month.

HAZARD ASSESSMENT

As required by the Risk Management Program regulations, the Reddy Ice-Phoenix facility has conducted a hazard assessment including offsite consequence analyses (OCAs) for potential accidental releases of anhydrous ammonia. The OCAs describe the potential offsite exposure to surrounding areas from an accidental release. A worst-case release scenario and alternative release scenarios from the facility, company, and industry history were studied and calculated using the EPA RMP*Comp modeling program, and the potentially affected offsite population and facilities were identified.

FIVE-YEAR ACCIDENT HISTORY

The Reddy Ice-Phoenix facility has not had any releases that would require reporting as part of a five-year accident history.

EMERGENCY PLANNING AND RESPONSE

The Reddy Ice-Phoenix facility operates under an Emergency Response Plan (ERP) that includes procedures for: notifying plant personnel, the public, and local emergency responders; emergency evacuation/response procedures; use of emergency alarms and equipment; employee training in evacuation and response procedures; first aid for ammonia exposure; and periodic review and updating of the ERP. The plan is reviewed regularly for verification of data, and revised and updated as necessary to reflect changes in facility operations and personnel.

As required, the facility has coordinated emergency response activities with the Maricopa County Department of Emergency Management and the Phoenix Fire Department, and has appropriate mechanisms in place to notify emergency responders if needed. The ammonia inventory is verified and reported annually to state and local authorities as required under EPCRA, and the plant is incorporated into the community emergency response plan developed under 42 USC.

PLANNED CHANGES

The Reddy Ice-Phoenix facility operates an ongoing program of facility preventive and predictive maintenance to identify and implement changes that may result in improved safety and operations. No current major system changes are planned. On a corporate level, Reddy Ice continues to implement changes to improve safety and decrease environmental impacts at all plants.